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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,871	06/02/2004	Michael Zimmermann	LVIP112US	3870
24041 7590 04/09/2007 SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			EXAMINER MICHALSKI, SEAN M	
			ART UNIT	PAPER NUMBER
			3724	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/709,871

Applicant(s)

ZIMMERMANN ET AL.

Examiner

Sean M. Michalski

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Parmley, "Locking-Type Indexing....".

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 1, 9 and 13 recite the broad recitation "cutting apparatus" in line 1, and the claim also recites "in particular a microtome or an ultramicrotome" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

Art Unit: 3724

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Persson'844 in view of Yasunaga et al. (US 5,748,366).

Persson'844 discloses, as discussed previously, a microtome (only figure) comprising a stereomicroscope (11) and pivoting device (10) and a positioning device (9) which positions the pivoting device. The apparatus as set forth is capable of performing all the functions required by the claim. The method of claims 9 and 12 recites that the elements above must be 'provided'; by their very presence they have been 'provided'. The step of pivoting is anticipated by column 2 line 23. It is noted that any angle the pivot moves to is 'defined', at least since all the angles are measurable.

Yasunaga discloses a different observation device (4 figure 3) which was pivotable on a curved rigid guide 7, which had a groove (8 figure 3), and the curved rigid guide encloses the pivoting device (11 and associated elements plus 14 and associated elements).

In the same field of problem solving endeavor it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 by replacing the pivot structure with a curved rigid guide setup as taught by Yasunaga. The motivation to combine is that the pivot assembly of Yasunaga "enables the operator to easily observe

Art Unit: 3724

the part to be or being operated on at every angle from every direction" (column 2 lines 53 and 54).

2. Claims 1-5, 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persson'844 in view of Yasunaga et al. (US 5,748,366) in further view of Staehle (US 4,277,133).

Persson'844 discloses, as discussed previously, a microtome (only figure) comprising a stereomicroscope (11) and pivoting device (10) and a positioning device (9) which positions the pivoting device. The apparatus as set forth is capable of performing all the functions required by the claim. The method of claims 9 and 12 recites that the elements above must be 'provided'; by their very presence they have been 'provided'. The step of pivoting is anticipated by column 2 line 23. It is noted that any angle the pivot moves to is 'defined', at least since all the angles are measurable.

Persson'844 does not disclose a curved rigid guide for the pivoting device, a detent element arranged on the curved rigid guide, or a rotary knob including a shaft, the detent element being mounted on a shaft.

Yasunaga discloses a different observation device (4 figure 3) which was pivotable on a curved rigid guide 7, which had a groove (8 figure 3), and the curved rigid guide encloses the pivoting device (11 and associated elements plus 14 and associated elements).

In the same field of problem solving endeavor it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 by replacing the pivot

Art Unit: 3724

structure with a curved rigid guide setup as taught by Yasunaga. The motivation to combine is that the pivot assembly of yasunaga "enables the operator to easily observe the part to be or being operated on at every angle from every direction" (column 2 lines 53 and 54).

Persson'844 in view of Yasunaga et al. still lacks a teaching of the use of detents.

Detents are extremely old and well known mechanisms for relative retention, in predetermined positions. Please see extrinsic reference Parmley which gives information on what one of ordinary skill would know about the use of detents. A detent is defined as "a catch or lever" which locks one element relative to another.

Staehle teaches the use of detents to hold an observation device at certain predetermined angles (figure 2, and column 3 lines 20-45 describe this in some specificity). Staehle further teaches the use of a rotary knob with a shaft (the detent element being mounted on/ integral with/ the terminus of said shaft, specifically the part of the shaft which is inserted into a groove or slot is considered the detent) to interact with the detent grooves of the curved rigid guide (20 and 21 figure 2).

In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 in view of Yasunaga et al. by using a detent locking system as taught by Staelhe. The motivation to combine is that detents provide excellent positive locking that is easily effected and disconnected, and provides for ease of use and manufacture (see Parmley page 9-7 the first column, describing the ease of using a detent system).

Regarding claim 3, the pivoting device can be positioned between detent positions, since the device must at least move from one detent to the next, and during transit it is positioned between the detents. This meets the limitations of the claim.

Regarding claim 4, there are detent grooves on a pivot element shown in Staehle, either 16 or 20 may be considered multiple grooves on a pivot element. Staehle is relied on to the extent it shows that detents are used to fix microscopes in specific angles. The exact positioning of detents on one element or another is somewhat a matter of design choice. See *In re Japikse*, 86 USPQ 70, which held that rearranging the parts of an invention involves only routine skill in the art.

The apparatus as set forth is capable of performing all the functions required by the method of claim 9, which recites that the elements above must be 'provided'; by their very presence they have been 'provided'. The step of pivoting is anticipated by column 2 line 23. It is noted that any angle the pivot moves to is 'defined', at least since all the angles are measurable.

3. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persson'844 in view of in view of Yasunaga et al. (US 5,748,366) in further view of Persson'578 (USPN 3,405,578).

Persson'844 discloses, as discussed previously, a microtome (only figure) comprising a stereomicroscope (11) and pivoting device (10) and a positioning device (9) which positions the pivoting device. The apparatus as set forth is capable of

Art Unit: 3724

performing all the functions required by the claim. The method of claims 9 and 12 recites that the elements above must be 'provided'; by their very presence they have been 'provided'. The step of pivoting is anticipated by column 2 line 23. It is noted that any angle the pivot moves to is 'defined', at least since all the angles are measurable.

Yasunaga discloses a different observation device (4 figure 3) which was pivotable on a curved rigid guide 7, which had a groove (8 figure 3), and the curved rigid guide encloses the pivoting device (11 and associated elements plus 14 and associated elements).

In the same field of problem solving endeavor it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 by replacing the pivot structure with a curved rigid guide setup as taught by Yasunaga. The motivation to combine is that the pivot assembly of Yasunaga "enables the operator to easily observe the part to be or being operated on at every angle from every direction" (column 2 lines 53 and 54).

Persson'844 in view of Yasunaga et al. does not explicitly disclose that the positioning device includes a scale.

Persson'578 discloses a microtome having a scale (11 figure 2) indicating the position of a microscope in relation to the cutting edge of the blade.

In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 by providing the rotating microtome microscope with a scale as taught by Persson'578. The motivation to combine is that providing a scale allows the user to examine the quality of the knife. An additional

Art Unit: 3724

motivation would be that in scientific experimentation repeatability is important, and so being able to record every parameter of a process (such as angle) will provide a more complete and credible data set.

4. Claim 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persson'844 in view of Yasunaga et al. (US 5,748,366) in further view of Staehle (US 4,277,133) as applied to claims 1-5 8-10 and 13 above, and in further view of Persson'578 (USPN 3,405,578).

Persson'844 in view of Yasunaga et al. (US 5,748,366) in further view of Staehle (US 4,277,133) discloses the method of claim 9, as discussed above.

Persson'844 in view of Yasunaga et al. (US 5,748,366) in further view of Staehle (US 4,277,133) does not explicitly disclose that the positioning device includes a scale.

Persson'578 discloses a microtome having a scale (11 figure 2) indicating the position of a microscope in relation to the cutting edge of the blade.

In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Persson'844 by providing the rotating microtome microscope with a scale as taught by Persson'578. The motivation to combine is that providing a scale allows the user to examine the quality of the knife. An additional motivation would be that in scientific experimentation repeatability is important, and so being able to record every parameter of a process (such as angle) will provide a more complete and credible data set.

Regarding claim 11, whenever the arm of Persson'844 in view of Yasunaga et al. (US 5,748,366) in further view of Staehle (US 4,277,133) in further view of Persson'578 is moved, pivoting is accomplished to a defined position marking (see 11, of Persson'578; refer to column 2 lines 20-30).

Response to Arguments

5. Applicant's arguments filed 1/16/2007 have been fully considered but they are not persuasive, except as otherwise noted below:

The objection to the drawings, and the previous 112 1st issues are withdrawn.

The 112 2nd rejections with regards to the observation device / stereomicroscope indefiniteness, is withdrawn in response to the amendment canceling the narrower range. Some indefiniteness issues still remain, as indicated above and in the previous action with regards to "cutting device" and "in particular a microtome...".

6. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

7. Applicants argument that element 9 of Persson'844 is not considered a positioning device is not persuasive (page 14 of the remarks submitted 1/12/2007), since the recitation "positioning device" conveys nearly no structural limitations. The

Art Unit: 3724

trunnion *is* a positioning device. The pivoting device is clearly seen to be *positioned on the trunnion*. Since the positioning device allows the pivot to be positioned upon it, it meets the extremely broad recitation "a positioning device".

8. The argument in page 16 of applicants remarks, that "applicants have amended claim 6 to claim the device in which the scale is disposed on a knob" is incorrect. Claim 6 simply does not contain any such limitation. All arguments to that effect are ineffective as a result. Additionally they are moot in view of the new rejections. In response to the argument that there is no motivation to combine with Persson'578, examiner clearly and explicitly stated the motivation. Applicant has not submitted evidence to overcome the motivation stated, and has not effectively rebuffed the prima facie case of obviousness which was presented.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3724

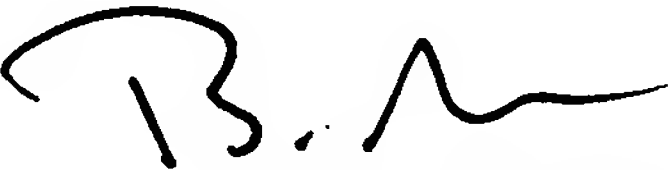
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMM


BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER